

# METHOD AND APPARATUS TO DIRECT SOUND

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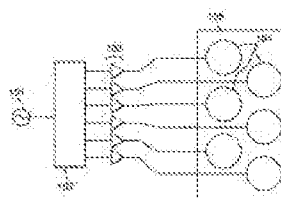
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Abstract not available for JP 2003510924 (T)

Abstract of corresponding document: **WO 0123104 (A2)**

The invention relates to sonic steerable antennae and their use to achieve a variety of effects. The invention comprises a method and apparatus for taking an input signal, replicating it a number of times and modifying each of the replicas before routing them to respective output transducers such that a desired sound field is created. This sound field may comprise a directed beam, focus beam or a simulated origin. Further, "anti-sound" may be directed so as to create nulls (quiet spots) in an already existing sound field. The input signal replicas may also be modified in way which changes their amplitude or they may be filtered to provide the desired delaying.; Reflective or resonant surfaces may be used to achieve a surround sound effect, a microphone may be located in front of an array of loudspeakers, beams of light may be used to identify the present focal position, a limiting device may be used to ensure that clipping or distortion is reduced when more than one input signal is output by the same device and the concept of beam directivity may be used to achieve input nulls or beams in a microphone made up of an array of input transducers. Further, sound field shaping information may be associated with an audio signal to be broadcast.



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